In the Specification

Please replace paragraph [0026] of the specification with the following paragraph:

[0026] The buffer may contribute detergent and salts. This may be achieved by aiding blood element solublization by introducing 10-30 mM Potassium Phosphate at a pH range of 7.8 to 8.0, driving Phospholipase A_2 activity by adding 10-80 mM Magnesium Chloride as the divalent cation, adding 20-150 mM Sodium Chloride, and including 10-200 mM Aurintricarboxylic Acid during the DNase incubation process. The buffer may also include 1.0-1.2% ~~Triton~~ TRITON X-100 (octylphenol ethoxylate). Additional steps may include combining 20-35 mM methyl 6-O-(N-heptylcarbamoyl)-α-D-glucopyranoside and 0.05-0.1% Saponin; and storing the enzymes by using a trehalose buffer. Storing the enzymes is accomplished by using a trehalose buffer in combination with methyl 6-O-(N-heptylcarbamoyl)- α -D-glucopyranoside. The trehalose storage buffer comprises 10 mM Potassium Phosphate, 0.01-0.04% ~~Triton~~ TRITON X-100 (octylphenol ethoxylate), 1-5 mM Dithiothreitol, and 0.3-0.5 M Trehalose.

Please replace paragraph [0045] of the specification with the following paragraph:

[0045] In Fig. 1, a blood draw 30 is performed on a patient. A solution of ~~PBS~~ phosphate-buffered saline (PBS), pH 7.4 and 1.2% TRITON X-100 is added, the blood is vortexed and centrifuged 40 creating pellet 60 in a 15 ml tube 50. Preferably, resins, metal hydroxides, and/or nano materials may be added with the PBS/TRITON X-100 solution to capture particles such as bacteria, virus, fungi, cancerous cells, prions, toxins and the like to contribute greater density to these particles. The increase in particle density allows lower speeds to run during centrifugation.

Please replace paragraph [0049] of the specification with the following paragraph:

[0049] The preparation of the fibrin lysis reagent is shown as Protocol 1 in Fig. 2 wherein NaCl, MnCl, ~~DTT~~ Dithiothreitol (DTT), DNAse, and plasminogen are added to mixing tube 110. Sodium phosphate is then added to mixing tube 110 and the solution is distributed into 1.5 ml reagent tubes 120 placed on ice. The reagent tubes 120 are frozen to -75°C for approximately 20 minutes. Approximately 2,700 U of streptokinase 130 is added to the wall of reagent tubes 120 just above the frozen plasminogen solution.

Please replace paragraph [0050] of the specification with the following paragraph:

[0050] Figs. 3-6 provide PCR results derived from testing blood samples seeded with encapsulated vegetative avirulent Bacillus anthracis were grown according to CDC protocol # CDC.DFA.1.2, stored in 15% glycerol ~~TSB~~ Trehalose storage buffer (TSB), and frozen at -75°C. Stocks of avirulent Yersinia pestis grown in TSB at 37°C, frozen in 15% glycerol TSB, and frozen at -75°C. Bacterial counts were tested at the time of harvest and retested at the time of sample spike.

Please replace paragraph [0053] of the specification with the following paragraph:

[0053] The present invention reproducibly generates analyte DNA appropriate for PCR testing of Bacillus anthracis using patient blood samples that are up to 3 months old Sensitivity is 100% at <10 CFU / ml of human blood when using 6 ml of blood collected in a Becton Dickinson ~~Vacutainer~~ VACUTAINER (Tables 1 and 2). This protocol also allows detection of Yersinia pestis at 100% sensitivity at <10 CFU / ml for at least one of four oligo sets according to the more limited data gathered for this organism (Table 3). It should be noted that CDC does not consider samples positive for Y. pestis unless two oligo sets produce an acceptable PCR signal.